LAKE: WILSON P (UPPER) (VLMP 21)
TOWN: BOWDOIN COL GR WEST
COUNTY: PISCATAQUIS

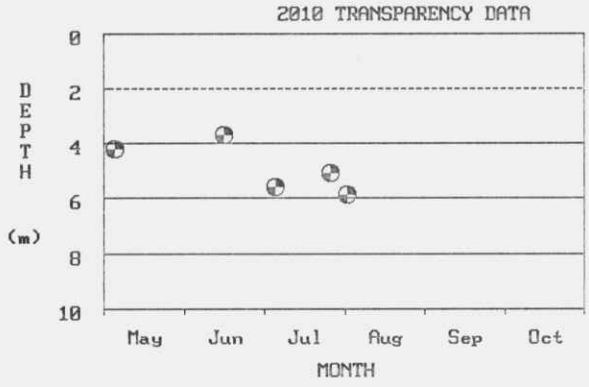
MIDAS: 410
TRUE BASIN: 1
SAMPLE STATION: 1

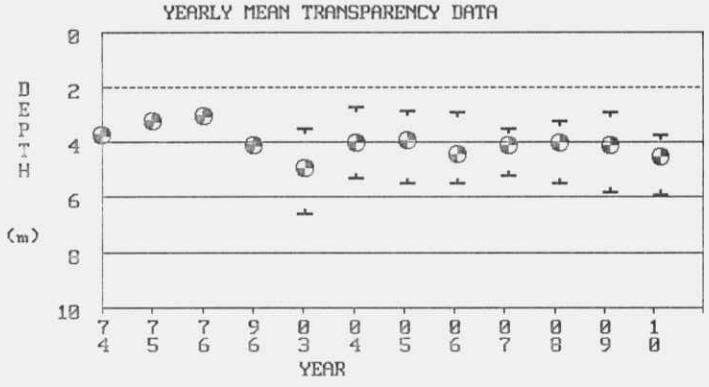
WHOLE LAKE INFORMATION
MAX. DEPTH: 20 m. (64 ft.)
MEAN DEPTH: 5 m. (15 ft.)
DELORME ATLAS #: 41
USGS QUAD: NUMBER FOUR MOUNTAIN
IFW REGION E: Moosehead Lake (Greenville)
IFW FISH. MANAGMENT: Coldwater

TRUE BASIN CHARACTERISTICS
SURFACE AREA: 380.0 ha. (939.0 a.)
FLUSHING RATE: 1.92 flushes/yr.
VOLUME: 16100000.0 cu. m. (13060 ac.-ft.)
DIRECT DRAINAGE AREA: 40.66 sq. km. (15.70 sq. mi.)

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. WILSON P (UPPER) has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:





Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visable at bottom of lake (or one reading used in calculation was visable)].

	MEAN COLOR (SPU)	MEAN pH	MEAN ALK (mg/l)	MEAN COND. (uS /cm)	TOTAL PHOS. MEANS (ppb) EPI CORE	SURF GRAB	BOT. GRAB	PRO. GRAB	SECCHI DISK (m.) MIN.	MEAN	MAX.	N	CHLOROPHYLL A(ppb) MIN.	MEAN	MAX.	TROPHIC STATE INDICES EPI PHOS C	G	SEC	CHL
YEAR																			
1974	25	6.80	11.0	25	-	-	-	-	3.7	3.7	3.7	1	2.7	2.7	2.7	-	-	-	-
1975	20	6.70	8.5	19	-	12	-	-	3.2	3.2	3.2	1	3.4	3.4	3.4	-	-	-	-
1976	40	7.00	12.0	29	9	-	-	-	3.0	3.0	3.0	1	3.5	3.5	3.5	-	-	-	-
1996	27	-	7.0	28	19	-	18	-	4.1	4.1	4.1	1	3.4	3.4	3.4	-	-	-	-
2003	-	-	-	-	-	-	-	-	3.5	4.9	6.6	4	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	2.7	4.0	5.3	4	-	-	-	-	-	-	-
2005	31	7.17	8.6	27	8	-	15	-	2.8	3.9	5.5	5	10.0	10.0	10.0	-	-	62	-
2006	-	-	-	-	-	8	-	-	2.9	4.4	5.5	5	-	-	-	-	-	55	-
2007	-	-	-	-	-	-	-	-	3.5	4.1	5.2	5	-	-	-	-	-	59	-
2008	-	-	-	-	-	-	-	-	3.2	4.0	5.5	4	-	-	-	-	-	-	-
2009	-	-	-	-	13	-	13	-	2.9	4.1	5.8	4	3.8	3.8	3.8	-	-	-	-
2010	-	-	-	-	-	-	-	-	3.7	4.5	5.9	3	-	-	-	-	-	-	-
SUMMARY:	29	6.88	9.4	26	12	10	15	-	2.7	4.0	6.6	12	2.7	4.5	10.0	-	-	59	-

LAKE: WILSON P (UPPER) (VLMP 21)
TOWN: BOWDOIN COL GR WEST
COUNTY: PISCATAQUIS

MIDAS: 410
*TRUE BASIN: 1
*SAMPLE STATION: 1

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

	SAMPLE DATE											
DEPTH	08/14/74		09/10/75		08/23/76		08/14/96		08/25/05		08/20/09	
m	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm
0.0	22.6	8.5	15.3	9.7	21.0	8.6	20.9	8.3	20.0	8.2	25.4	8.0
1.0	-	-	15.3	9.5	21.0	8.6	20.9	8.4	20.2	8.2	25.2	8.0
2.0	22.5	8.5	15.3	9.6	21.0	8.6	20.9	8.4	20.2	7.9	24.4	8.1
3.0	22.3	8.6	15.3	9.5	20.0	8.5	20.9	8.4	20.2	7.9	22.7	8.2
4.0	-	-	15.3	9.5	18.5	7.6	19.0	6.3	20.2	7.9	20.6	6.8
5.0	19.4	6.8	15.2	9.4	17.5	6.5	17.2	5.2	20.2	7.7	19.7	5.7
6.0	16.8	4.3	15.2	9.4	16.0	4.4	16.1	4.9	18.5	5.0	18.4	3.9
7.0	-	-	15.2	9.3	13.8	2.6	15.6	4.5	14.2	2.9	17.0	3.0
8.0	12.2	3.3	15.2	9.4	12.5	2.2	14.3	4.1	11.4	2.7	15.9	2.0
9.0	10.2	3.8	14.2	8.6	11.8	2.0	13.1	4.0	10.6	2.9	15.0	2.1
10.0	-	-	10.5	3.5	11.0	2.0	11.0	4.2	10.3	3.1	13.7	2.3
11.0	9.9	4.0	9.3	1.6	10.0	2.1	9.8	4.3	10.0	3.0	12.5	2.2
12.0	9.1	3.7	8.0	1.8	9.2	1.7	9.0	4.1	9.8	2.8	11.4	1.9
13.0	-	-	7.0	1.5	9.1	1.6	8.7	3.8	9.8	2.5	10.5	1.2
14.0	9.0	3.3	7.0	1.2	-	-	8.3	3.4	9.6	2.2	10.0	0.7
15.0	8.9	2.8	6.6	1.1	9.0	1.4	8.2	3.3	9.5	2.0	9.7	0.5
16.0	-	-	6.5	0.8	9.0	1.2	8.2	3.2	9.5	1.5	9.6	0.4
17.0	8.9	2.7	6.4	0.7	9.0	1.0	8.2	3.0	-	-	9.5	0.4
18.0	8.9	2.6	6.4	0.4	-	-	8.1	2.9	-	-	9.5	0.4
19.0	8.9	1.6	6.2	0.3	-	-	8.1	2.8	-	-	-	-

WATER QUALITY SUMMARY

WILSON POND (UPPER), BOWDOIN COLLEGE GRANT-WEST
Midas: 410, Sample Station # 1

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include data for bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring data for Upper Wilson Pond was collected for six years between 1974 and 2004. Limited chemical information was collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of Upper Wilson Pond is considered to be average based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chla). The potential for nuisance algae blooms on Upper Wilson Pond is low- moderate.

Water Quality Measures: Upper Wilson Pond is a slightly colored lake (color about 28 SPU) with an average SDT of 3.8 m (12.5 ft). The range of water column TP for Upper Wilson Pond averaged 14, with a range of 9 to 19 parts per billion (ppb), while Chla averaged 3.3 ppb (range 2.7-3.5). The August 1996 dissolved oxygen (DO) profile showed moderate to high DO depletion in bottom waters of the lake, consistent with data from the 1970's. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal loading) is low to moderate.

Upper Wilson Pond is managed by MDIFW primarily as a coldwater fishery. DO, in the cold, deep water during late summer reaches less than 4ppm. This reduces the suitability of this habitat for coldwater fish, which prefer water with more than 5ppm oxygen.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at http://www.lakesofmaine.org/ and/or http://www.maine.gov/dep/blwq/lake.htm, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

Filename: wils410, Revised: 3/05, By: rb